

25,000 & 40,000 rpm – power to 0.88 hp  
**Constant Governed High Speed and Torque**

Now your **Doosan Machine Tools America DNM & MYNX Machines** deliver faster production 24/7



**650CAT40**  
0.80 - 0.88 hp

for Doosan  
DNM Series



**650CAT50**  
0.80 - 0.88 hp

for Doosan  
MYNX Series

With patented governed  
high speed and torque  
Air Turbine Spindles®, your  
**Doosan Machine Tools America  
DNM & MYNX Machines**  
are high speed machines!

*No Duty Cycle*

*Call for a Demonstration*

Fully automated loading  
with our patent pending  
Toolchanger Mounting Assembly (TMA)

*Manual Connection also Possible*

**Doosan  
Machine  
Tools America  
DNM Series**



**Doosan  
Machine  
Tools America  
MYNX Series**





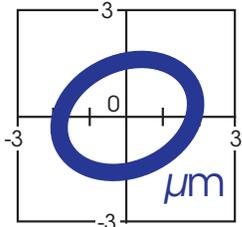
Dramatically reduce your cycle times, optimize cutting tool performance and life.

Keep continuous tool path engagement on your **Doosan Machine Tools America DNM & MYNX Machines** at high speed even in angles and hard material. Ideal for micro machining. **25,000 & 40,000 rpm < 0.88 hp**

## Accuracy

Most of the problems that occur in micro machining come from a lack of RPM and poor dynamic runout. **Air Turbine Spindles®** use the highest quality runout and balancing systems on the market today. This creates the best dynamic high speed precision.

Runout measured at the nose of spindle. (reference value)

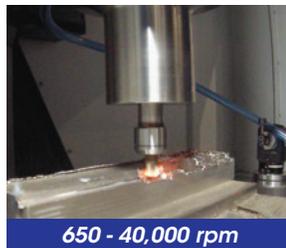


600 SERIES

- Improved Machining Cycle Times
- Longer Tool Life
- Better Surface Finish
- Automatic Loading

## Super Low Vibration Design

Powerful, totally oil-free low friction motor produces extremely low vibration and heat in continuous 24/7 operation. No thermal expansion, great reliability.



Ultra Precision ER 11 collets standard.

## Environmentally Clean

No oil required, and maintenance free.

**Air Pressure:** Dry, Clean Air @ 90 psi / 6.2 bar

**Air Consumption (Working):**  
**650:** 14 - 35 cfm (6.60 - 16.50 L/s)

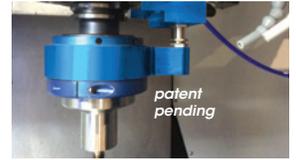
**Low Noise Design:** Under 67 dBA (cutting noise of endmills can be heard).

**Standard Equipment:** 0.3 µm High Flow Filter/Extractor

## Automatic Toolchanger

No need for operator downtime.

Automatically load **Air Turbine Spindles®** with our wrap around Toolchanger Mounting Assembly.



## Superior Technology

- Unique patented direct drive with no vanes, gears or brushes to wear, burn or break.
- Cooled by turbine air for 24/7 operation. No oil or control system required. No Duty Cycle.
- Governor keeps Constant High Speed + Torque on tool path in angles and corners.

## Spindle Selection

√ = Optimum

∞ = Acceptable

! = Dependent upon cutting conditions

x = Not recommended for use

		650 CAT40/CAT50	
Drill	Ø 0.1 - 0.3 mm	√	
	Ø 0.3 - 0.5 mm	√	
	Ø 0.5 - 1.0 mm	√	
	Ø 1.0 - 1.5 mm	√	
	Ø 1.5 - 2.0 mm	√	
Endmill	Ø 0.1 - 1.0 mm	√	
	Ø 1.0 - 2.0 mm	√	
	Ø 2.0 - 3.5 mm	√	
	Ø 3.5 - 5.0 mm	√	
	Ø 5.0 - 6.0 mm	∞	
Jig Grinding		√	
Specifications		650 CAT40/CAT50	
Speed (rpm)	25,000	40,000	
Power (hp)	0.80	0.88	
T.I.R. at Nose	Less than 2 µm		
Collet Range	0.5 mm - 7.5 mm		
Air Pressure	90 psi / 6.2 bar (0.62 MPa)		
Air Flow	14 - 35 cfm (6.60 - 16.50 L/s) [ANR]		



for

**Doosan Machine Tools America**